

# Ultra-Dense-II Compression Moulded NdFeB Magnet Grade

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Product data sheet



[sgtec.com](http://sgtec.com)

## ➤ General Information

SG Technologies has developed reliable and robust production processes to greatly enhance the magnetic and mechanical properties of Compression Bonded NdFeB magnets. This works with any grade of NdFeB rapidly-quenched powder.

Specifically, powders which may have been developed for:

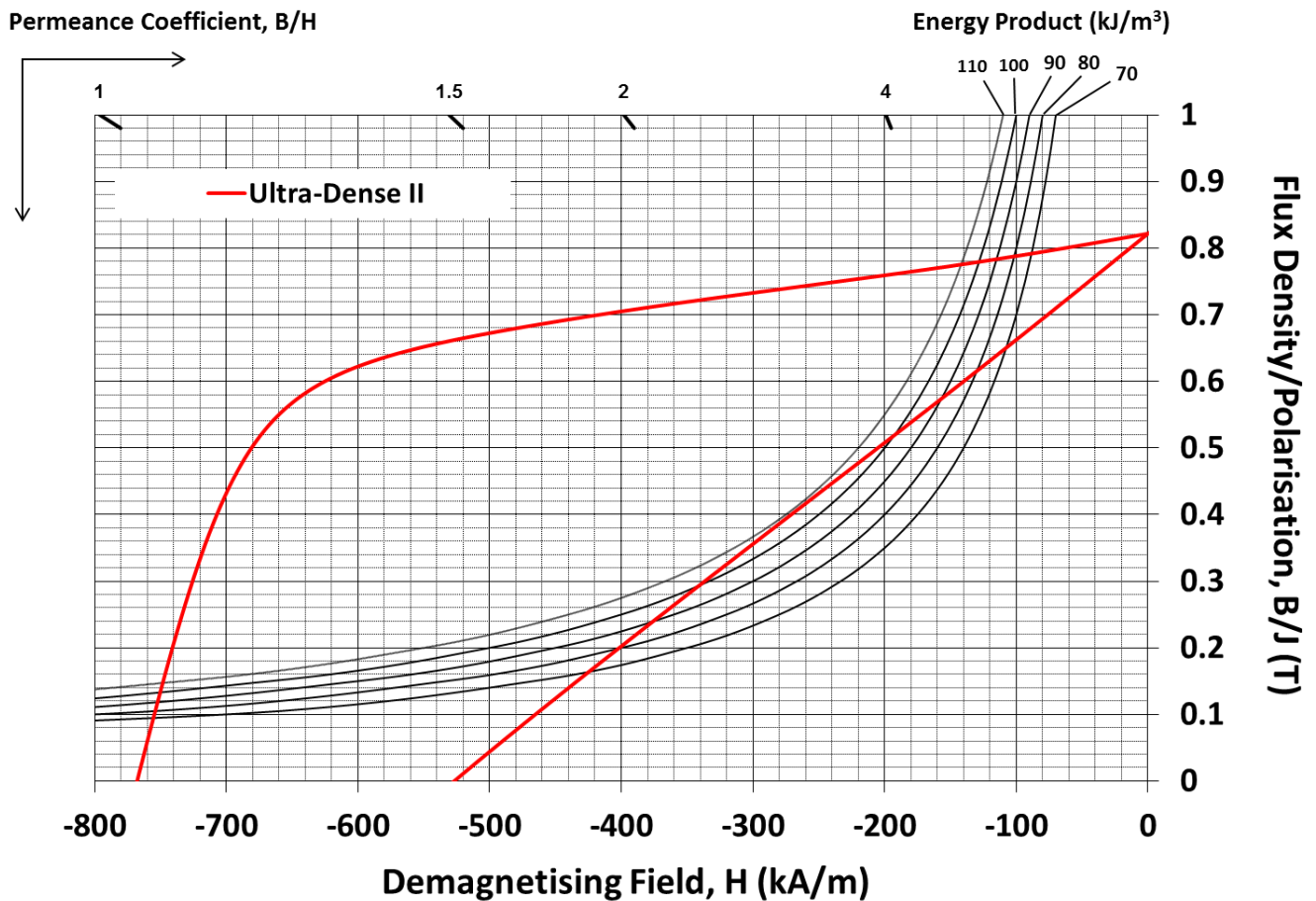
- High  $B_r$
- High Temperature Operation
- High Mechanical Strength

The Ultra-Dense II grade of compression moulded magnet exhibits 10% higher density than the industry standard grades.

This means we can offer bonded magnets with up to 17% higher remanence ( $B_r$ ) and 30% higher maximum energy product  $(BH)_{max}$ .

The following graphs and table provide specific details of our state-of-the-art compression moulded magnet grade.

## ➤ Magnetic Properties



## ➤ Magnetic Properties of Ultra-Dense-II Grade\*

Magnetic Property	SI units	CGS units
Density	6,600 kg/m <sup>3</sup>	6.6 g/cm <sup>3</sup>
<b>B<sub>r</sub></b>	0.82 T	8.2 kG
<b>H<sub>cB</sub></b>	530 kA/m	6.6 kOe
<b>H<sub>cJ</sub></b>	760 kA/m	9.6 kOe
<b>(BH)<sub>max</sub></b>	110 kJ/m <sup>3</sup>	14 MGOe
<b>μ<sub>rec</sub></b>	-1.15	-1.15
<b>B<sub>r</sub> Temp. Coef. α%</b> (<100°C)	-0.11 %K <sup>-1</sup>	-0.11 %K <sup>-1</sup>
<b>H<sub>cJ</sub> Temp. Coef. β%</b> (<100°C)	-0.33 %K <sup>-1</sup>	-0.33 %K <sup>-1</sup>

\*Determined following IEC404-5

## ➤ Further Information

**SG Technologies** invites existing and prospective customers to contact our specialists to discuss their requirements.

The combinations of material choice, binding agents, ultimate magnetic and mechanical requirements could well be a unique solution to a customer challenge. We would be delighted to share our knowledge with you.

For situations which require corrosion protection a full range of coatings are available; please enquire.

**SG Technologies** has excellent relationships with suppliers of magnetisation equipment; please ask for recommendations.

For all further information and data regarding the production of finished parts please contact us at SG Technologies:

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